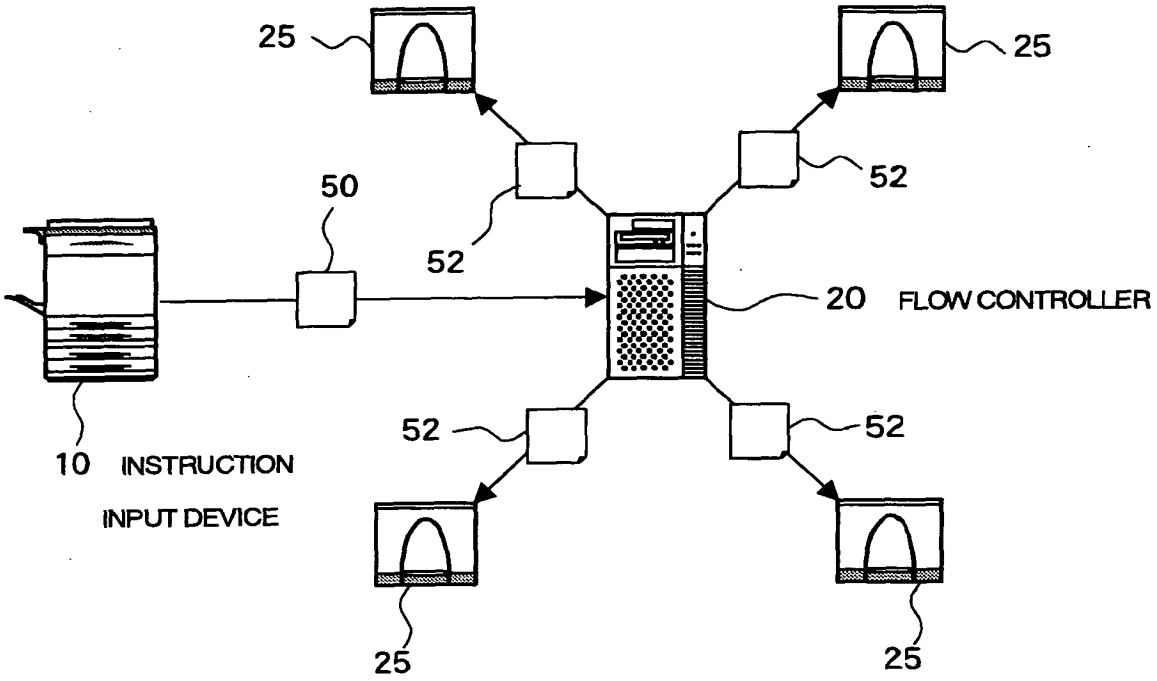
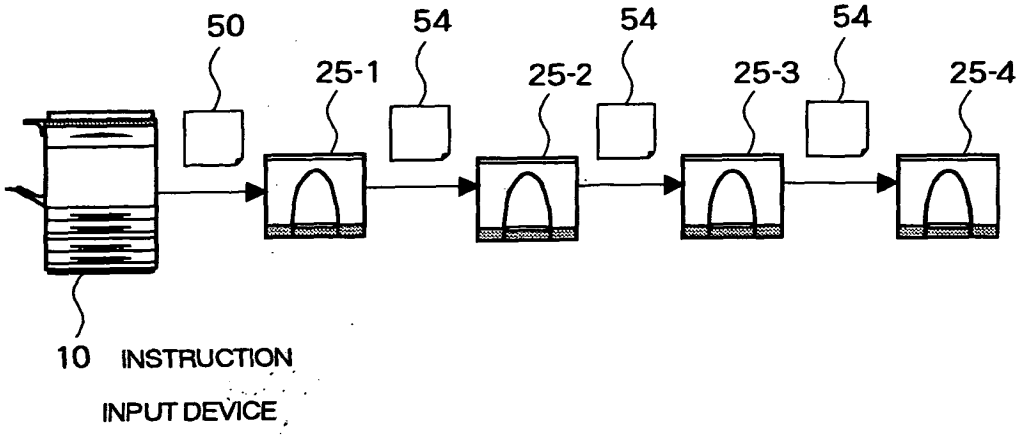

25
25
50
52
52
20
FLOW CONTROLLER
52
52
10
INSTRUCTION
INPUT DEVICE
25
25

Fig. 1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54
54
54
25-1
25-2
25-3
25-4
10
INSTRUCTION
INPUT DEVICE

Fig. 2

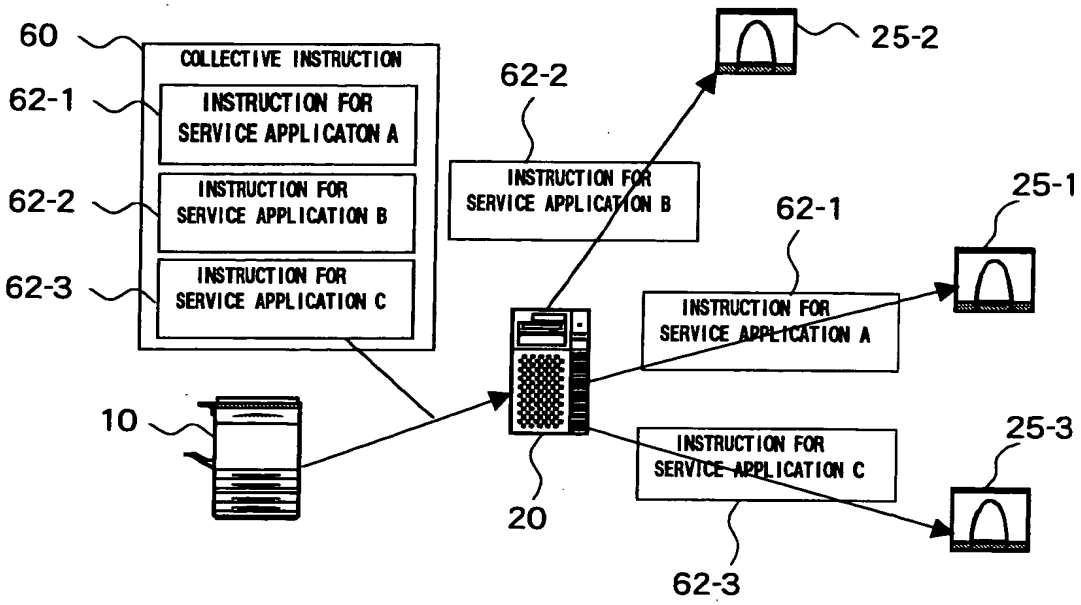

60
COLLECTIVE INSTRUCTION
62-1
INSTRUCTION FOR SERVICE APPLICATON A
62-2
INSTRUCTION FOR SERVICE APPLICATION B
62-3
INSTRUCTION FOR SERVICE APPLICATION C
10
20
62-2
INSTRUCTION FOR SERVICE APPLICATION B
25-2
62-1
INSTRUCTION FOR SERVICE APPLICATION A
25-1
INSTRUCTION FOR SERVICE APPLICATION C
25-3
62-3

Fig. 3

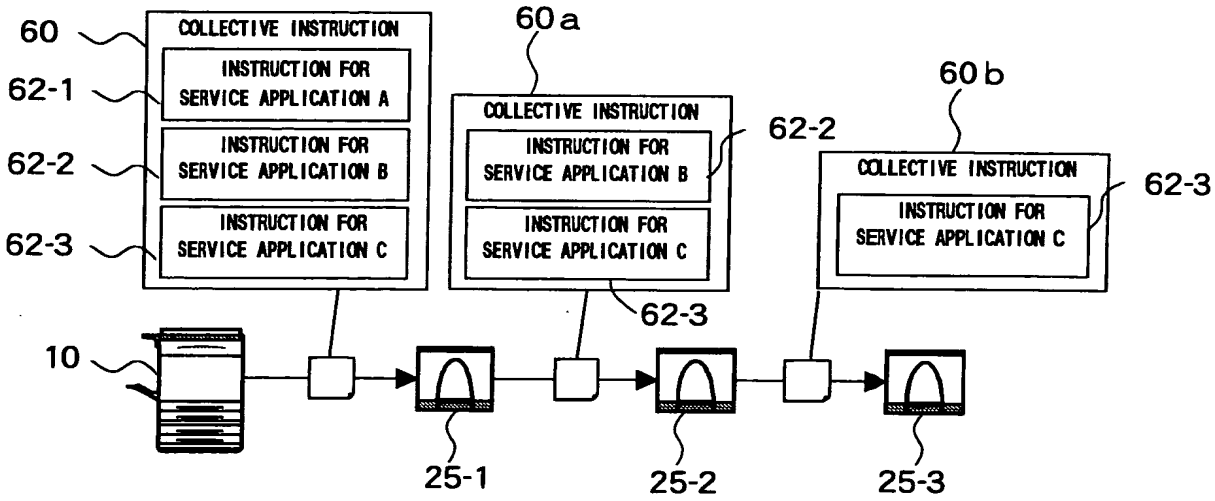

60
COLLECTIVE INSTRUCTION
62-1
INSTRUCTION FOR SERVICE APPLICATION A
62-2
INSTRUCTION FOR SERVICE APPLICATION B
62-3
INSTRUCTION FOR SERVICE APPLICATION C
10
60a
COLLECTIVE INSTRUCTION
INSTRUCTION FOR SERVICE APPLICATION B
INSTRUCTION FOR SERVICE APPLICATION C
62-2
62-3
60b
COLLECTIVE INSTRUCTION
INSTRUCTION FOR SERVICE APPLICATION C
62-3
25-1
25-2
25-3

Fig. 4

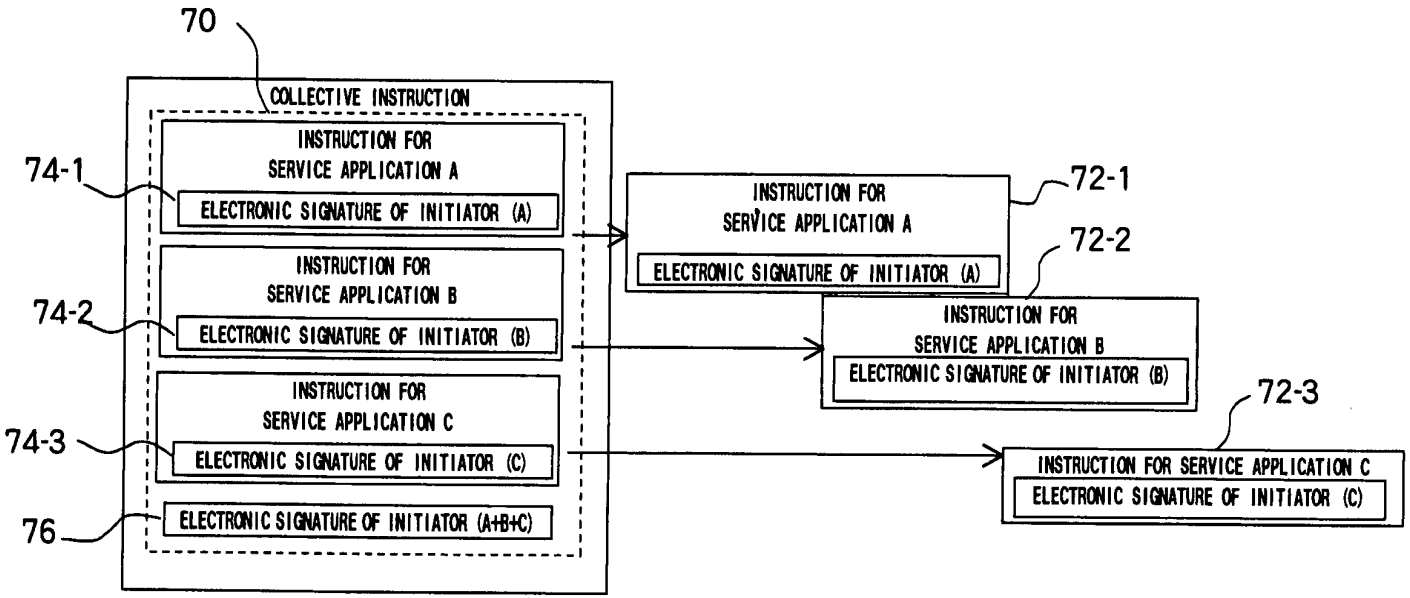
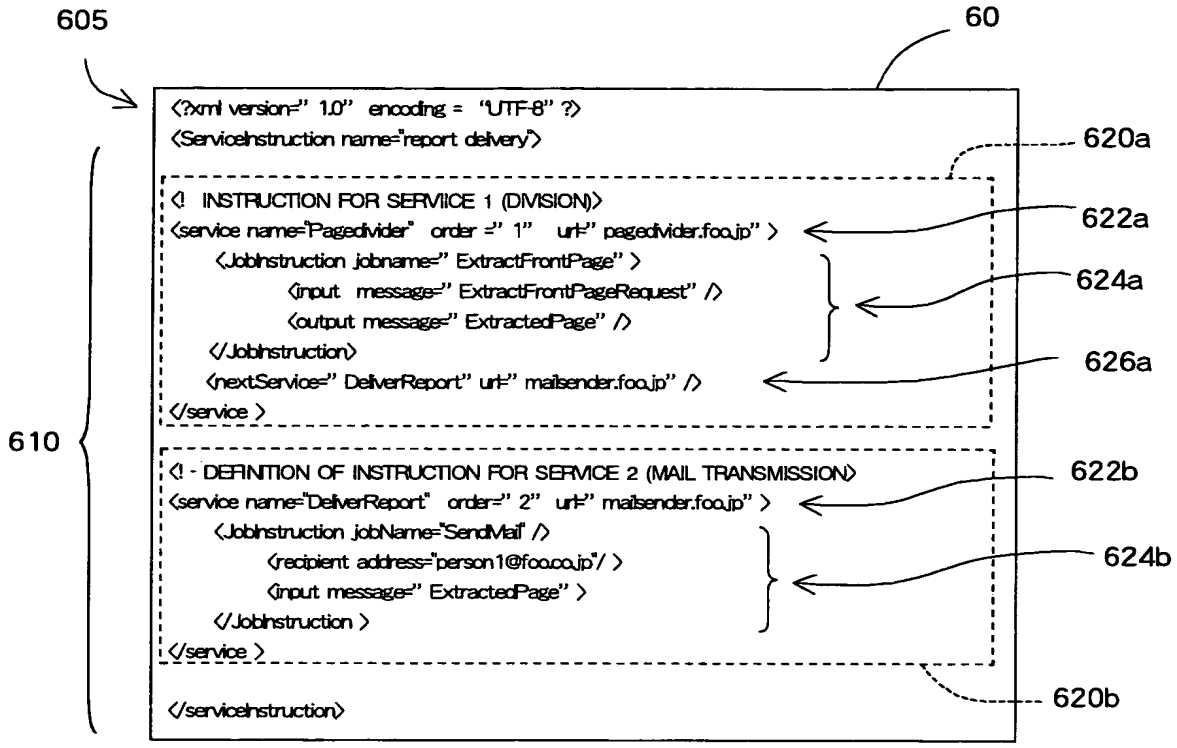

70
COLLECTIVE INSTRUCTION
INSTRUCTION FOR SERVICE APPLICATION A
ELECTRONIC SIGNATURE OF INITIATOR (A)
74-1
INSTRUCTION FOR SERVICE APPLICATION B
ELECTRONIC SIGNATURE OF INITIATOR (B)
74-2
INSTRUCTION FOR SERVICE APPLICATION C
ELECTRONIC SIGNATURE OF INITIATOR (C)
74-3
ELECTRONIC SIGNATURE OF INITIATOR (A+B+C)
76
INSTRUCTION FOR SERVICE APPLICATION A
ELECTRONIC SIGNATURE OF INITIATOR (A)
72-1
INSTRUCTION FOR SERVICE APPLICATION B
ELECTRONIC SIGNATURE OF INITIATOR (B)
72-2
INSTRUCTION FOR SERVICE APPLICATION C
ELECTRONIC SIGNATURE OF INITIATOR (C)
72-3

Fig. 5


605
60
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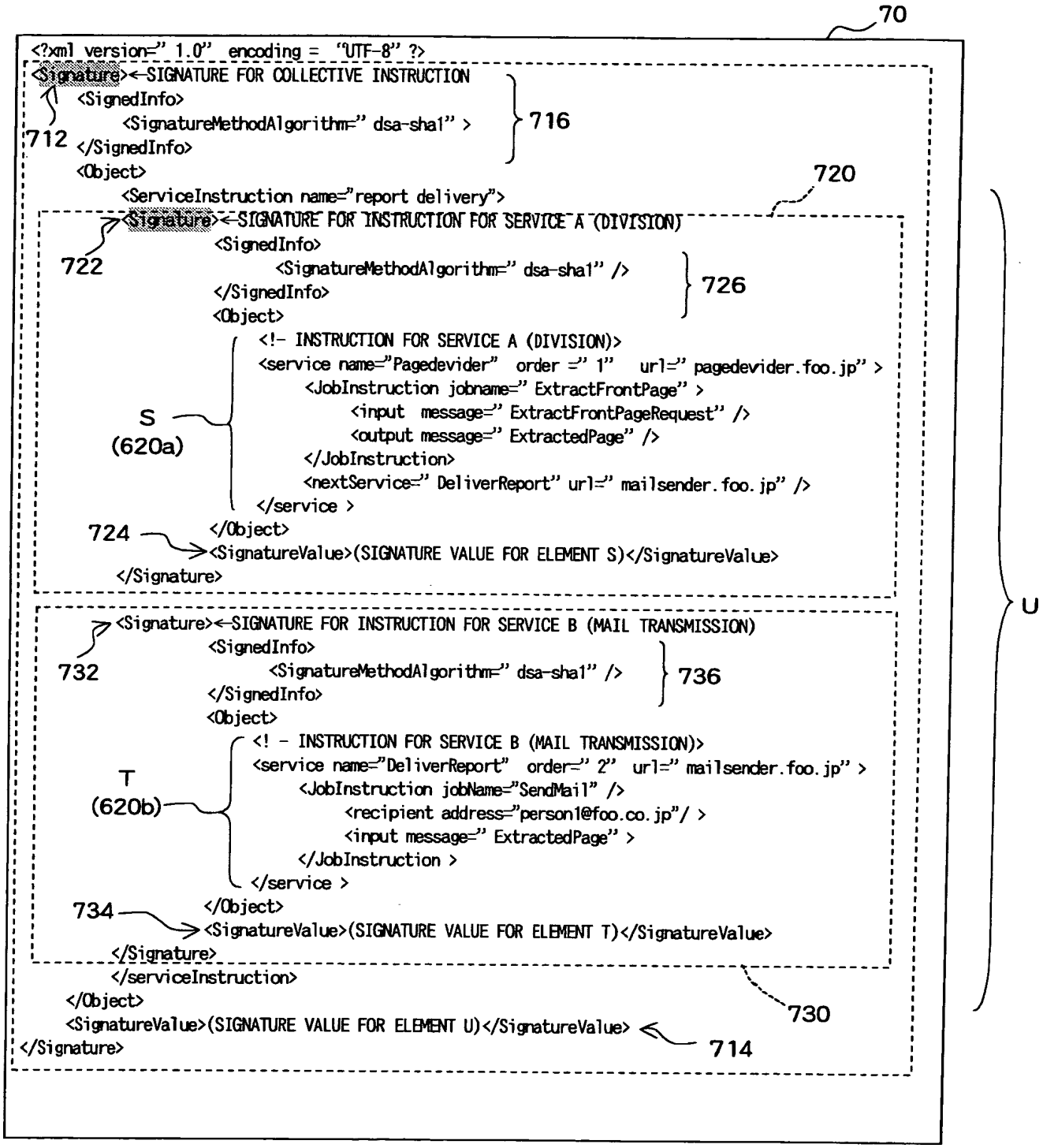
620a
<! INSTRUCTION FOR SERVIICE 1 (DIVISION)>
<service name="Pagedivider" order =" 1" url=" pagedivider.foo.jp" >
622a
<JobInstruction jobname=" ExtractFrontPage" >
624a
<input message=" ExtractFrontPageRequest" />
<output message=" ExtractedPage" />
</JobInstruction>
<nextService=" DeliverReport" url=" mailsender.foo.jp" />
626a
</service >
610
<! - DEFINITION OF INSTRUCTION FOR SERVICE 2 (MAIL TRANSMISSION)>
622b
<service name="DeliverReport" order=" 2" url=" mailsender.foo.jp" >
<JobInstruction jobName="SendMail" />
624b
<recipient address="person1@foo.co.jp"/ >
<input message=" ExtractedPage" >
</JobInstruction >
</service >
620b
</ServiceInstruction>

Fig. 6


70
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712
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<SignatureMethodAlgorithm=" dsa-sha1" >
716
</SignedInfo>
<Object>
720
<ServiceInstruction name="report delivery">
<Signature><SIGNATURE FOR INSTRUCTION FOR SERVICE A (DIVISION)
722
<SignedInfo>
<SignatureMethodAlgorithm=" dsa-sha1" />
726
</SignedInfo>
<Object>
<!- INSTRUCTION FOR SERVICE A (DIVISION)>
<service name="Pagedevider" order =" 1" url=" pagedevider.foo.jp" >
S
(620a)
<JobInstruction jobname=" ExtractFrontPage" >
<input message=" ExtractFrontPageRequest" />
<output message=" ExtractedPage" />
</JobInstruction>
<nextService=" DeliverReport" url=" mailsender.foo.jp" />
</service >
724
</Object>
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</Signature>
<Signature><SIGNATURE FOR INSTRUCTION FOR SERVICE B (MAIL TRANSMISSION)
732
<SignedInfo>
<SignatureMethodAlgorithm=" dsa-sha1" />
736
</SignedInfo>
<Object>
<! - INSTRUCTION FOR SERVICE B (MAIL TRANSMISSION)>
<service name="DeliverReport" order=" 2" url=" mailsender.foo.jp" >
T
(620b)
<JobInstruction jobName="SendMail" />
<recipient address="person1@foo.co.jp"/ >
<input message=" ExtractedPage" >
</JobInstruction >
</service >
734
</Object>
<SignatureValue>(SIGNATURE VALUE FOR ELEMENT T)</SignatureValue>
</Signature>
730
</serviceInstruction>
</Object>
<SignatureValue>(SIGNATURE VALUE FOR ELEMENT U)</SignatureValue>
714
</Signature>
U

Fig. 7

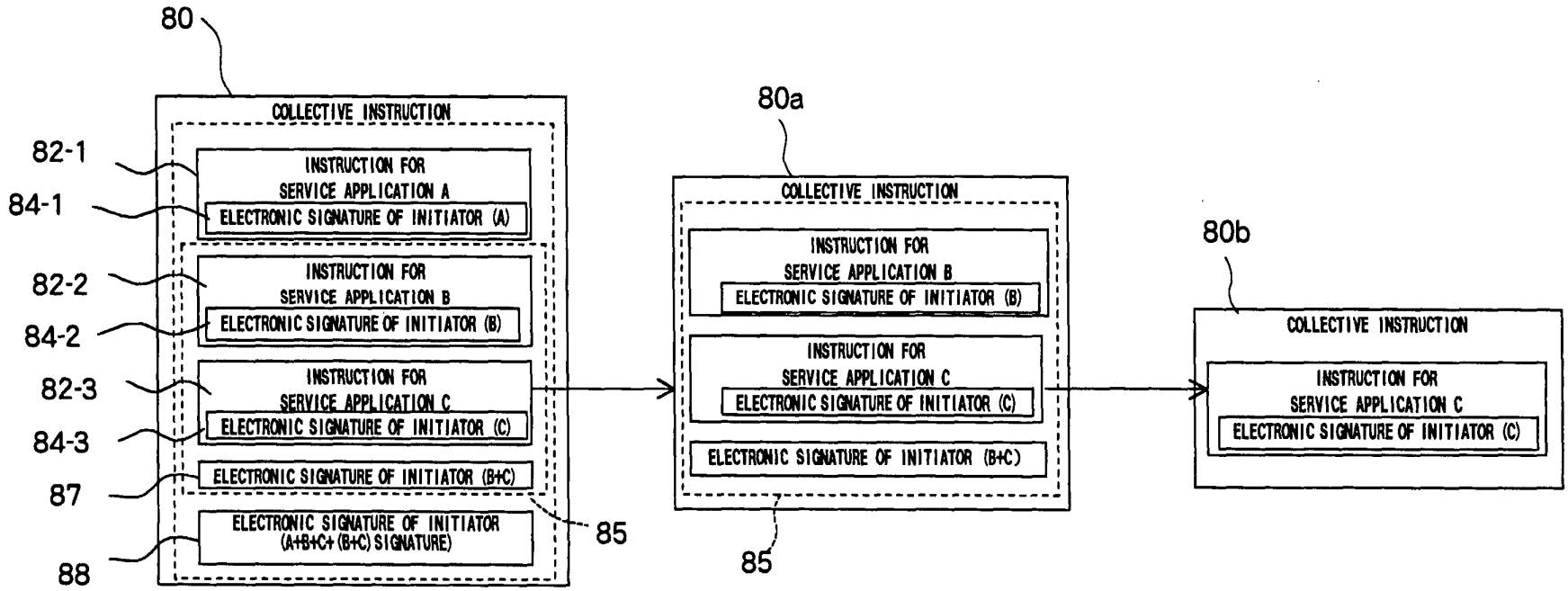
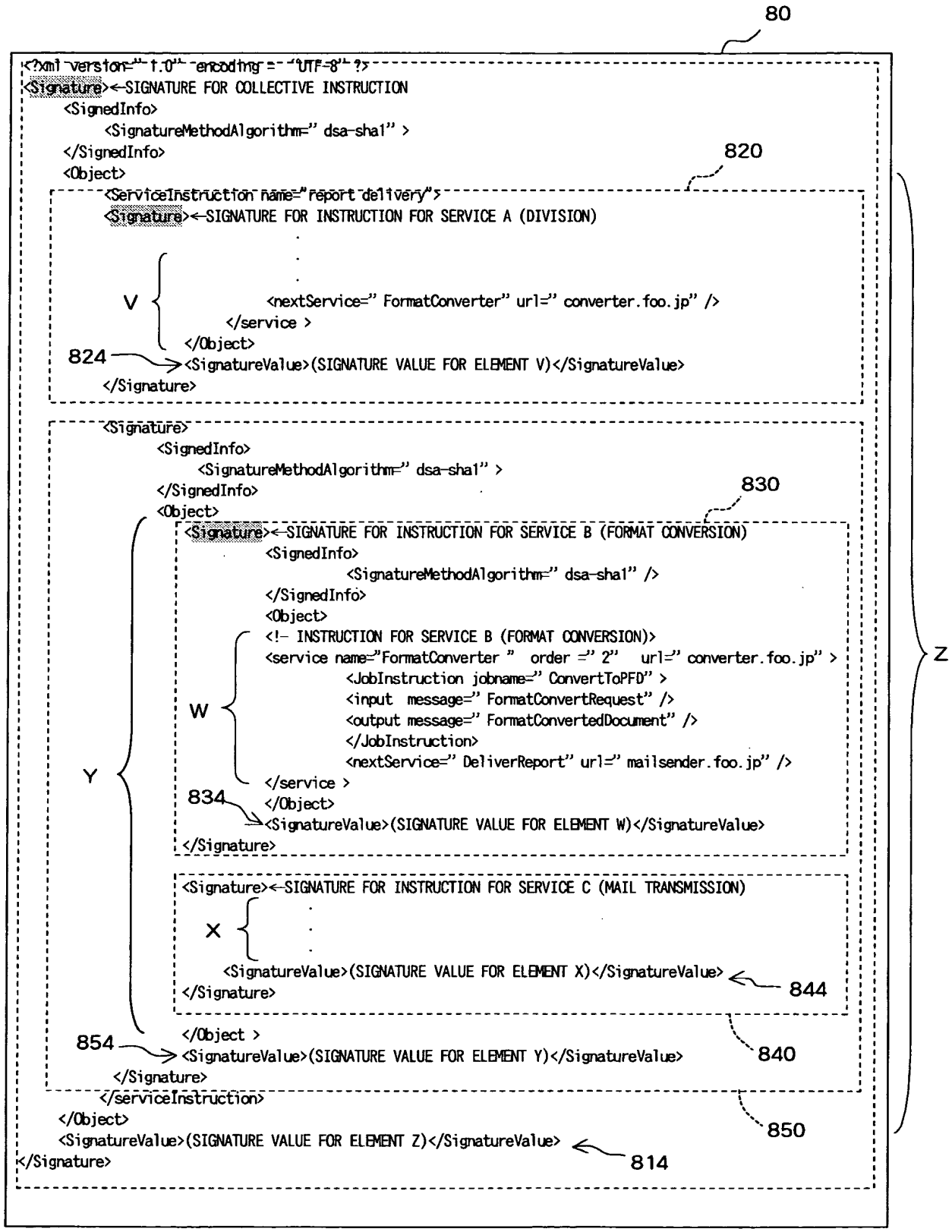

80
COLLECTIVE INSTRUCTION
82-1
INSTRUCTION FOR SERVICE APPLICATION A
84-1
ELECTRONIC SIGNATURE OF INITIATOR (A)
82-2
INSTRUCTION FOR SERVICE APPLICATION B
84-2
ELECTRONIC SIGNATURE OF INITIATOR (B)
82-3
INSTRUCTION FOR SERVICE APPLICATION C
84-3
ELECTRONIC SIGNATURE OF INITIATOR (C)
87
ELECTRONIC SIGNATURE OF INITIATOR (B+C)
88
ELECTRONIC SIGNATURE OF INITIATOR (A+B+C+(B+C) SIGNATURE)
85
80a
COLLECTIVE INSTRUCTION
INSTRUCTION FOR SERVICE APPLICATION B
ELECTRONIC SIGNATURE OF INITIATOR (B)
INSTRUCTION FOR SERVICE APPLICATION C
ELECTRONIC SIGNATURE OF INITIATOR (C)
ELECTRONIC SIGNATURE OF INITIATOR (B+C)
85
80b
COLLECTIVE INSTRUCTION
INSTRUCTION FOR SERVICE APPLICATION C
ELECTRONIC SIGNATURE OF INITIATOR (C)

Fig. 8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<SignedInfo>
<SignatureMethodAlgorithm=" dsa-sha1" >
</SignedInfo>
<Object>
820
<ServiceInstruction name="report delivery">
<Signature><-SIGNATURE FOR INSTRUCTION FOR SERVICE A (DIVISION)
V
<nextService=" FormatConverter" url=" converter.foo.jp" />
</service >
</Object>
824
<SignatureValue>(SIGNATURE VALUE FOR ELEMENT V)</SignatureValue>
</Signature>
<Signature>
<SignedInfo>
<SignatureMethodAlgorithm=" dsa-sha1" >
</SignedInfo>
<Object>
830
<Signature><-SIGNATURE FOR INSTRUCTION FOR SERVICE B (FORMAT CONVERSION)
<SignedInfo>
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</SignedInfo>
<Object>
<!- INSTRUCTION FOR SERVICE B (FORMAT CONVERSION)>
<service name="FormatConverter " order =" 2" url=" converter.foo.jp" >
W
<JobInstruction jobname=" ConvertToPFD" >
<input message=" FormatConvertRequest" />
<output message=" FormatConvertedDocument" />
</JobInstruction>
<nextService=" DeliverReport" url=" mailsender.foo.jp" />
</service >
Y
834
</Object>
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</Signature>
<Signature><-SIGNATURE FOR INSTRUCTION FOR SERVICE C (MAIL TRANSMISSION)
X
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844
</Signature>
</Object >
854
<SignatureValue>(SIGNATURE VALUE FOR ELEMENT Y)</SignatureValue>
840
</Signature>
</serviceInstruction>
850
</Object>
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814
</Signature>
Z

Fig. 9

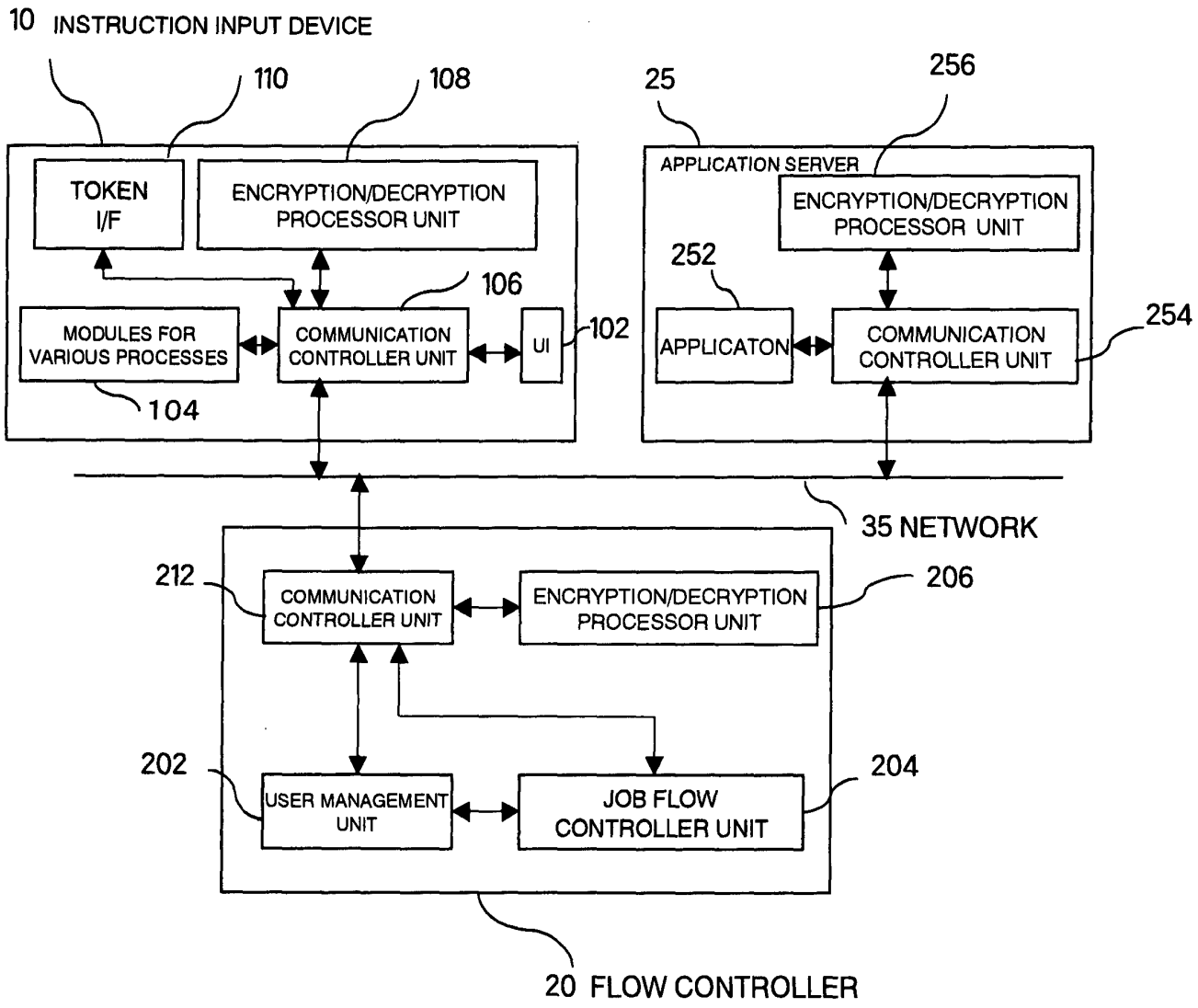
10 INSTRUCTION INPUT DEVICE
110
108
TOKEN I/F
ENCRYPTION/DECRYPTION PROCESSOR UNIT
106
MODULES FOR VARIOUS PROCESSES
COMMUNICATION CONTROLLER UNIT
UI
102
104
25
256
APPLICATION SERVER
ENCRYPTION/DECRYPTION PROCESSOR UNIT
252
APPLICATON
COMMUNICATION CONTROLLER UNIT
254
35 NETWORK
212
COMMUNICATION CONTROLLER UNIT
ENCRYPTION/DECRYPTION PROCESSOR UNIT
206
202
USER MANAGEMENT UNIT
JOB FLOW CONTROLLER UNIT
204
20 FLOW CONTROLLER

Fig. 10